

1. An improved distillation device comprising: an enclosed outer tube adapted for the flow of liquids, said outer tube having an inner surface and an external surface and having a central axis running the length of said tube, said outer tube having a cross section of ovoid construction and having an upper section, said upper section having an indented portion having a lower most point at about the center of said upper section so that said lower most point is above said central axis of said outer tube, a trough portion in connection with the inner wall of said tube and running parallel to said central axis, said trough portion having a curved surface so as to collect liquids that condense on said upper section and fall into said trough portion, said outer tube having an enclosed construction and having a vacuum forming means in connection with said outer tube so as to enhance the distillation of the liquid in said tube.

2. The apparatus of claim 1 wherein said outer tube has a lower section, said lower section having a material that is reflective of radiation, said reflective material so disposed on said lower section so as to reflect solar radiation upward in the direction of the liquid in said outer tube.

3. The apparatus of claim 2 wherein said lower portion has a darker coloring so as to enhance the absorption of said solar radiation.

4. The apparatus of claim 1 wherein said upper section has a material that is photochromic in nature so as to get darker in color in response to changes in the intensity of said radiation.

5. The apparatus of claim 1 wherein said outer tube is divided into two halves along a line parallel to said central axis, each of said halves in connection with a means for

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hinging said halves so as to allow said halves to pivot with respect to one another

6. An improved distillation device comprising: an enclosed outer tube adapted for the flow of liquids, said outer tube having an inner surface and an external surface and having a central axis running the length of said tube, said outer tube having a cross section of ovoid construction and having an upper section, and having pair of trough portions running parallel to said central axis and in each connection with said inner surface of said outer tube, said trough portions located on opposite sides of said outer tube and of curved surface so as to collect liquids that condense on said upper section and fall into said trough portions, said upper section having an indented portion having a pair of lower points disposed so that said lower points are above said pair of trough portions,

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7. The apparatus of claim 6 wherein said outer tube has a lower section, said lower section having a material that is reflective of radiation, said reflective material so disposed on said lower section so as to reflect solar radiation upward in the direction of the liquid in said outer tube.

8. The apparatus of claim 7 wherein said lower portion has a darker coloring so as to enhance the absorption of said solar radiation.

9. The apparatus of claim 6 wherein said upper section has a material that is photochromic in nature so as to get darker in color in response to changes in the intensity of said radiation.

10. The apparatus of claim 6 wherein said outer tube is divided into two halves along a line parallel to said central axis, each of said halves in connection with a means for

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